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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,624	06/16/2000	RAN M. OZ	ABS-004	1033
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SONNENSCHN NATH & ROSENTHAL LLP			VU, NGOC K	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/595,624

Applicant(s)

OZ ET AL.

Examiner

Ngoc K. Vu

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-19, 27-30, 32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-19, 27-30, 32 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/12/05 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-12, 14-19, 27-30, 32 and 33 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 4 is objected to because of the following informalities: claim 4 calls for allocating said network resources that previously recited in claim 3. Accordingly, examiner suggests that "the method according to claim 2" should be changed into "the method according to claim 3".

4. Claim 27 is objected to because of the following informalities: the term "said multimedia router" in line 8 should be changed into "said broadband multimedia router". Appropriate correction is required.

5. Claim 32 is objected to because of the following informalities: the term "said broadband network destination" in lines 5 and 7 should be changed into "said addressable broadband network destination", and the term "said broadband network" should be changed into "a broadband network". Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2611

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Addington (US 6,928,656 B1) in view of Kostreski et al. (US 6,130,898 A).

Regarding claim 1, Addington discloses a method for transmitting data over a broadband networks having a plurality of downstream channels and an upstream channel, the method comprising the steps of:

receiving, at a broadband multimedia router (118, 115 & 103) and from a digital set top box STB (155) via said upstream channel, an upstream data packet having an upstream destination address (IP address) included therein (see col. 10, lines 33-36; col. 3, lines 47-50 and figure 1);

directing, by said broadband media router, said upstream data packet to an addressable destination (IP server or external network), designated by said upstream destination address included in said upstream data packet (see col. 3, lines 49-51; col. 10, lines 36-37; col. 3, line 60 to col. 4, line 16);

receiving, at said broadband multimedia router and from said addressable destination, a downstream data packet having a downstream destination address (MAC address) associated with the digital STB included therein (see col. 10, lines 49-62; col. 7, lines 40-45; col. 5, lines 23-30 and 55-64; col. 4, lines 58-62);

converting said downstream data packet to one or more MPEG transport packets suitable for transmission to said digital STB in a selected one of said download channels (e.g., a particular QAM frequency) (col. 3, lines 21-40; col. 4, lines 30-38; col. 7, lines 40-58);

transmitting said MPEG transport packets to said digital STB, via said selected downstream channel (the particular QAM frequency) (see col. 3, lines 21-24; col. 4, lines 35-38; col. 7, lines 45-47).

Addington does not specifically disclose the MPEG transport packets including a program number value of a video session to which the digital STB is tuned. However, Kostreski teaches that a MPEG packet stream carrying packets for one or two programs, the PID values for each program, and each program is assigned a unique program number PN. For example, HBO might have a program number "1", and the program map for HBO might be found in packets corresponding to PID 132; Showtime might have a program number "2", and the program map for Showtime might be found in packets identified by PID 87 (see col. 14, lines 7-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Addington by including a program number value of a video session to which the digital STB is tuned in MPEG transport packets as taught by Kostreski in order to provide a particular program appropriately.

Regarding claim 2, Addington teaches that the step of converting is performed according to a plurality of sources (col. 4, lines 17-35; col. 3, lines 30-40; col. 10, lines 24-28).

Regarding claim 6, Addington teaches transmitting said MPEG transport packets to said digital STB, via said selected downstream channel (the particular QAM frequency) (see col. 3, lines 21-24; col. 4, lines 35-38; col. 7, lines 45-47). Addington does not teach the step of controlling a transmission rate of said MPEG transport packets. Official Notice is taken that controlling a rate of transmission of data packets to a receiver is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Addington by controlling a transmission rate of transport packets in order to avoid overflow or under fill while processing.

Regarding claim 7, Addington teaches that the downstream channels are in-band channels and the upstream channel is an out-of-band channel (see col. 3, lines 21-25 and 47-51; col. 5, lines 28-30 and figure 1).

8. Claims 3-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Addington (US 6,928,656 B1) in view of Kostreski et al. (US 6,130,898 A) and further in view of Smyth et al. (US 20020007492 A1).

Regarding claims 3-5, Addington discloses receiving a data session request and providing messaging between the client and server to negotiate resources to support the upstream communication requirements. Addington further teaches that the server validates the authority of the client for connections (see col. 6, line 67 to col. 7, line 24). Addington does not specifically disclose allocating network resources. Smyth discloses that the system 100 is capable of dynamically allocating information channel resources to the subscribers via their respective STBs 116 (see page 6, 0052). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined system of Addington and Kostreski by allocating network resources as taught by Smyth to ensure level of quality service to subscribers.

9. Claims 8-11, 15-19, 32 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Addington (US 6,928,656 B1) in view of Smyth et al. (US 20020007492 A1).

Regarding claim 8, Smyth discloses a method comprising:

establishing a data session between a digital set top box STB (155) communicatively coupled to a hybrid fiber coax HFC (120) network and an addressable Internet destination (IP server) over a selected one of a number of downstream media transport channels (a particular QAM frequency) adapted to communicate transport packets over said HFC network, said data session including data packets having address information (MAC address) indicative of said

Art Unit: 2611

STB and said addressable Internet destination (IP address) embedded therein and said selected downstream media transport channel corresponding to a media session to which the STB is tune (the tuning resource descriptors instruct the STB 155 how to tune to the MPEG transport stream transporting the downstream IP data for the STB 155. Upon receiving a successful session confirm message, the STB 155 tunes to the appropriate QAM frequency) (see col. 7, lines 18-49);

converting said data packets to data transport packets according to a media transport specification (when the IP server receives IP data for the IP address associated with the STB 155, the IP server encapsulates the IP data into MPEG transport packets – see col. 7, lines 30-45); and

transmitting said media transport packets via said selected at least one media transport channel (col. 7, lines 43-49; col. 3, lines 21-25).

Addington does not specifically disclose allocating logical media resources over downstream media transport channel. Smyth discloses that the system 100 is capable of dynamically allocating information channel resources to the subscribers via their respective STBs 116 (see page 6, 0052). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Addington by allocating information channel resources as taught by Smyth to ensure level of quality service to subscribers.

Regarding claims 9, 16 and 18, Addington as modified by Smyth further discloses that a transport processing module 110 adds ID information to the video and audio content provided by the server 108 such as program specific information and packet identification numbers (see Smyth: page 4, 0041).

Regarding claim 10, the combined system of Addington and Smyth teaches transmitting the media session to the STB as media transport packets according to said media transport specification and via said downstream media transport channel, said data transport packet and said media transport packets sharing a common transport program number (see Addington: col. 7, lines 34-45; Smyth: page 6, 0052; page 4, 0041).

Regarding claim 11, Addington discloses providing data image and/or video (see col. 6, lines 31-39).

Regarding claims 15 and 17, Addington teaches that establishing the data session comprises selecting an existing media transport channel (QAM frequency) associated with a media session currently being received at the STB 155. Addington further teaches receiving a session selection from STB 155 (see col. 4, lines 35-40; col. 10, lines 33-46). Smyth discloses that a subscriber requesting a program requiring a high information channel resource channel will be allocated an additional sub-rate channel or a super rate channel. A subscriber requesting a program requiring a low information channel resource channel will be allocated fewer (or only one) sub-rate channels (see page 6, 0052).

Regarding claim 19, Addington teaches that the downstream channels are in-band channels and the upstream channel is an out-of-band channel (see col. 3, lines 21-25 and 47-51; col. 5, lines 28-30 and figure 1).

Regarding claim 32, Addington discloses a system, comprising a session manager and IP software switch (115) connected to a broadband multimedia router (118) and configured to establish a data session between an addressable broadband network destination (MAC address) communicatively coupled to the broadband multimedia router and an addressable Internet destination (IP server) in responsive to receiving downstream data session requests from said broadband network destination and transmitting data for data session over broadband

Art Unit: 2611

network to broadband network destination (see col. 10, lines 15-62). Addington does not specifically disclose allocating network resources. Smyth discloses that the system 100 is capable of dynamically allocating information channel resources to the subscribers via their respective STBs 116 (see page 6, 0052). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Addington by allocating information channel resources as taught by Smyth to ensure level of quality service to subscribers.

Regarding claim 33, Addington as modified by Smyth further teaches that a subscriber requesting a program requiring a high information channel resource channel will be allocated an additional sub-rate channel or a super rate channel. A subscriber requesting a program requiring a low information channel resource channel will be allocated fewer (or only one) sub-rate channels (see page 6, 0052).

10. Claims 27 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoarty et al. (US 6,305,020 B1) in view of Addington (US 6,928,656 B1).

Regarding claim 27, Hoarty discloses a broadband multimedia system (figure 1) comprising: a broadband multimedia router (112 & 121) communicatively connected to a data router (122) and between a plurality of media sources (111) and a plurality of network transmitters (within distribution plant 14); and a session manager (113), communicatively connected to said broadband multimedia router and configured to provide routing instructions to said multimedia router (112 & 121), for directing said media stream received from said media sources (111) to said network transmitters for transmitting over a broadband network (i.e., cable network) and directing addressable data packets received from said data router (122) to at least a selected one of the said network transmitters for transmitting over said broadband network to

a specific destination (particular home) associated with address information included in addressable data packets(see figure 1; col. 5, line 44 to col. 6, line 32).

Hoarty's system includes switching between inputs and outputs of the broadband multimedia router as receiving and transmitting data from sources to subscribers (see figure 1). Hoarty does not specifically teach encapsulating packets of media streams received from media sources within addressable packets. However, Addington discloses that IP server encapsulates the received IP data into MPEG transport packets. The MPEG packets are combined into the MPEG transport stream of the designated downstream route via a route 250 (see col. 7, lines 41-45; col. 4, lines 32-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hoarty by encapsulates the received IP data into MPEG transport packets as taught by Addington to effectively transmit the data to subscribers over the network.

Regarding claim 28, Hoarty discloses that session manager (113) receives data session requests (requests for program and/or service) and authorize data sessions in response thereto and allocate network resources for said data sessions (see col. 8, lines 28-31 and 54-62; col. 9, lines 38-47).

11. Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Addington (US 6,928,656 B1) in view of Smyth et al. (US 20020007492 A1) and further in view of Bauminger et al. (US 6681393 B1).

Regarding claims 12 and 14, Addington does not explicitly disclose at least partially overlaying at least one the data image over at least one media image. However, Bauminger discloses partially overlaying a picture on a display screen or partially overlaying a display message on the broadcast picture (see col. 4, lines 38-44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the

Art Unit: 2611

combined system of Addington and Smyth by partially overlaying display message over broadcast picture as taught by Bauminger to present images concurrently for viewing on screen.

12. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoarty et al. (US 6,305,020 B1) in view of Addington (US 6,928,656 B1) and further in view of Brodigan (US 6,530,086 B1).

Regarding claims 29 and 30, Hoarty discloses that the system manager performs call set-up which is the process of causing the assignment of a television information signal path to home 114b having a digital STB for interactive services (see col. 8, lines 54-59 and figure 1). Hoarty does not explicitly teach the system manger assigns a lay three address to the set top box. However, Brodigan teaches sending an IP address of a programming host computer that is assigned to a specific program channel and time associated to a STB (see col. 5, lines 17-22; col. 6, lines 7-14). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Hoarty and Addington by sending an IP address of a programming host computer that is assigned to a specific program channel and time associated to a STB as taught by Brodigan in order to allow real time response from user to an external service provider via communication network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 571-272-7306. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ngoc K. Vu
Primary Examiner
Art Unit 2611

February 21, 2006